AN OPTICAL SPRAY PAINT OPTIMIZATION SYSTEM AND METHOD

Patent number: NZ313454
Publication date: 1999-04-29
Inventor: BAUER RICKY J; KLEIN RICHARD J; SEVEY DOUGLAS L; BADAKHSHAN ALIREZA
Applicant: UNIV NORTHERN IOWA FOUNDATION
Classification:
- international: B05B12/00
- european:
Application number: NZ19960313454 19960719
Priority number(s): US19950504370 19950719; WO1996US12068 19960719

Also published as:
WO9703759 (A1)
EP0837739 (A1)
US5598972 (A1)
EP0837739 (B1)
AU702401 (B2)

Abstract not available for NZ313454
Abstract of correspondent: **US5598972**

An optical spray paint optimization system can be removably mounted to a spray paint gun, thus enhancing the ability of the user to guide the direction of the spray and also locate the nozzle at an optimum spray distance from the surface being painted. The preferred apparatus uses a diode laser, a beam splitter and a reflecting mirror to generate a reference beam and a gauge beam. The reference beam propagates in a fixed forward direction, but the direction of the gauge beam is adjustable by adjusting the attitude of the reflecting mirror. The reference beam and the gauge beam intersect at a convergence point which can be repositioned to a selected distance from the nozzle of the spray painting system by adjusting the path of the gauge beam, thus allowing the user to spray at the optimum spray distance by locating the convergence point on the surface being painted. The beams also aid in aiming the spray.